

# SAFETY DATA SHEET

4X

Infosafe No.: HC03H  
ISSUED Date : 27/03/2018  
ISSUED by: Hydro-Chem Pty Ltd

## 1. IDENTIFICATION

### GHS Product Identifier

4X

### Product Type

ALKALINE COIL CLEANER

### Company Name

Hydro-Chem Pty Ltd

### Address

23B Industrial Drive Braeside  
VIC 3195

### Telephone/Fax Number

Tel: (03) 9553 1011

### Emergency phone number

1300 558 788

### Emergency Contact Name

Tony Ventura

### Recommended use of the chemical and restrictions on use

THIS IS A CONCENTRATED FORMULATION. DO NOT USE UNDILUTED. Using the dilution scale on the side of the container as a guide, dilute appropriately for equipment to be cleaned. Apply with a low pressure sprayer, using a coarse spray pattern to avoid misting. Allow cleaning solution to react for 3 to 4 minutes; rinse thoroughly with water.

### Other Names

Name	Product Code
4X Coil Cleaner ,	
Coil Cleaner Concentrate	
4X Coil Cleaner Base	
Coil Cleaning Concentrate	
XXXX Coil Cleaner	

### Additional Information

Product Description: An alkaline coil cleaner. Ideal for use on air-cooled condensers, evaporators, electronic air filters and fan blades.

## 2. HAZARD IDENTIFICATION

### GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Acute Toxicity - Oral: Category 4  
Corrosive to Metals: Category 1  
Skin Corrosion/Irritation: Category 1A

**Signal Word (s)**

DANGER

**Hazard Statement (s)**

H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

**Pictogram (s)**

Corrosion, Exclamation mark



**Precautionary statement – Prevention**

P234 Keep only in original container.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash contaminated skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement – Response**

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P330 Rinse mouth.  
P363 Wash contaminated clothing before reuse.  
P390 Absorb spillage to prevent material damage.

**Precautionary statement – Storage**

P405 Store locked up.  
P406 Store in corrosive resistant/ container with a resistant inner liner.

**Precautionary statement – Disposal**

P501 Dispose of contents/container to / in accordance with local regulations.

**Other Information**

Highly corrosive to all body tissue. Considered to be highly toxic via all exposed routes. Prolonged contact with dilute solutions has been shown to have a destructive effect on the tissue. Contact dermatitis may result from working with the material.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Information on Composition**

All ingredients in this product are listed on the Australian Inventory of Chemical Substances (AICS).

## Ingredients

Name	CAS	Proportion
Potassium hydroxide	1310-58-3	10-30 %
Sodium hydroxide	1310-73-2	10-30 %

## 4. FIRST-AID MEASURES

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### Inhalation

Non-volatile. Remove victim from exposure - avoid becoming a casualty. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible - either on site or at the nearest hospital.

### Ingestion

Rinse mouth thoroughly with water immediately. Give water or milk to drink. DO NOT induce vomiting. If vomiting occurs give further water to achieve effective dilution. Seek immediate medical assistance.

### Skin

Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and rinse the contaminated skin area. Wash clothes before reuse. If swelling, redness, blistering or irritation occurs seek medical advice.

### Eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Urgently seek medical assistance. Transport to hospital or medical centre.

### First Aid Facilities

Provide general supportive measures (comfort, warmth, rest). Consult a physician and/or the nearest Poison Control Centre for all exposures except minor instances of inhalation or skin contact.

### Advice to Doctor

Treat symptomatically as for strong alkalis.

## 5. FIRE-FIGHTING MEASURES

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### Fire Fighting Measures

As in any fire, wear an approved self-contained breathing apparatus in pressure-demand, and full protective gear.

### Specific Hazards Arising From The Chemical

Not combustible.

Extinguish fire with the following: foam.  
carbon dioxide.  
water spray.  
dry chemical powder or BCF.

### Hazchem Code

2X

## 6. ACCIDENTAL RELEASE MEASURES

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### Spills & Disposal

Evacuate unprotected personnel from danger area. Wear appropriate protective clothing. Slippery when spilt. Avoid accidents, clean up immediately. Contain using sand and earth - prevent runoff into drains and waterways. Use absorbent (soil or sand, sawdust, inert material, vermiculite). Collect and seal in properly labelled drums for disposal. Neutralise remaining product with dilute acid, adjusting pH to 6-10. Wash area down with excess water. Refer to State Land Waste Management Authority. Caution - heat will be involved. Empty containers must be decontaminated and destroyed.

## 7. HANDLING AND STORAGE

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### Additional information on precautions for use

Always use good occupational work practices. Extremely slippery when spilt. HIGHLY CONCENTRATED FORMULATION - ALWAYS MIX WITH WATER BEFORE USE. Do not mix with other chemical products.

### Other Information

-----DO NOT USE UNDILUTED-----

Exothermic reaction on dilution with water. Extremely slippery when wet.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Occupational exposure limit values

For potassium hydroxide and sodium hydroxide - TLV, 2.0 mg/m<sup>3</sup> -Ceiling Value As published by the National Health & Medical Research Council.

Ceiling Value - Is the concentration that should not be exceeded even instantaneously.

TLV is the time weighted average concentration of the work atmosphere over a normal 8-hour work day and a 40-hour work week. Nearly all workers may be repeatedly exposed to this level, day after day, without adverse effect.

These TLVs are issued as guidelines for good practice. All atmospheric contamination should be kept to as low a level as is practically possible. These TLVs should not be used as fine lines between safe and dangerous concentrations.

### Appropriate Engineering Controls

Use with adequate ventilation. Avoid generating and inhaling mists or vapours.

### Personal Protective Equipment

Avoid all contact. The following personal protective equipment must be worn; safety glasses, goggles or faceshield as appropriate; impervious gloves; rubber boots; splash apron and overalls or similar protective apparel. Disconnect power from equipment prior to cleaning. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and protective equipment before storing/re-using.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Form

Liquid

### Appearance

Dark straw coloured strongly alkaline liquid. Hygroscopic. Miscible with water. Exothermic reaction on dilution with water.

**Boiling Point**

Not Allocated

**Specific Gravity**

1.35-1.45 @ 20°C (approx)

**pH**

12-14

**Vapour Pressure**

Not Allocated

**Flash Point**

Not Allocated

**Flammability**

Non flammable.

**Flammable Limits - Lower**

Not Allocated

**Other Information**

Solubility in water - Soluble.

## 10. STABILITY AND REACTIVITY

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**Possibility of hazardous reactions**

The substance is a strong base and reacts violently with acids. The concentrated form attacks aluminium, zinc and tin forming combustible gas (hydrogen). Reacts with ammonium salts generating ammonia gas. Absorbs water and carbon dioxide from the air. Vigorous exothermic reaction on dilution with water.

## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

KNOWN TOXICOLOGICAL DATA:

Potassium hydroxide toxicity: oral LD50(rat)- 365mg/kg

Low system toxicity

Sodium hydroxide toxicity: ipLD50(mice) = 40 mg/kg [for solid]

oral LDLO(rabbit) = 500 mg/kg [10% solution]

Low system toxicity

**Ingestion**

Can kill if swallowed.

Corrosive to mucous membranes. Ingestion may result in pain, nausea, vomiting, swelling of the larynx and subsequent suffocation, perforation of the gastrointestinal tract, cardiovascular collapse and coma.

**Inhalation**

Inhalation of mists or aerosols will result in respiratory irritation and possible corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema.

**Skin**

Highly corrosive to skin and any tissue with which it comes into contact. Produces burns, deep ulceration and gelatinous necrotic areas at the site of contact. Skin contact can result in little pain, thus care should be taken to avoid contamination of gloves and boots during use. Repeated or prolonged skin contact may lead to dermatitis effects.

**Eye**

Highly corrosive to eyes.

Corrosive to eyes; contact can cause corneal burns. Can cause conjunctivitis, corneal burns and ulceration. Contamination of eyes can result in permanent injury. Permanent eye damage, including loss of sight.

**Chronic Effects**

No data supplied.

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## 12. ECOLOGICAL INFORMATION

**Environmental Protection**

Avoid contaminating waterways.

Harmful to aquatic life.

For potassium hydroxide and sodium hydroxide - TLM 96: 100-10 ppm.

This substance may be hazardous to the environment; special attention should be given to the prevention of spills and the correct clean-up procedures.

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## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal**

Refer to State Land Waste Management Authority or a Licensed disposal contractor for disposal.

Empty containers must be decontaminated, rinse with water before landfill disposal.

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## 14. TRANSPORT INFORMATION

**U.N. Number**

1760

**UN proper shipping name**

CORROSIVE LIQUID, N.O.S.

**Transport hazard class(es)**

8

**Packing Group**

II

**Hazchem Code**

2X

**Storage and Transport**

UN No. 1760 (II)

Keep containers closed at all times. Store away from acids. Do not use aluminium or galvanized containers or use die-cast zinc or aluminium bungs. Steel bungs should be used.

Class 8 Corrosives shall not be loaded in the same vehicle with:

- Class 1 Explosives
- Class 4.3 Dangerous when wet substances
- Class 5.1 Oxidizing agents
- Class 5.2 Organic peroxides

Observe the requirements of the Australian Code for the transport of dangerous goods by road and rail.

Check regularly for spills and leaks.

**IERG Number**

37

## 15. REGULATORY INFORMATION

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### Poisons Schedule

S6

### Packaging & Labelling

1 and 5 litre HDPE (high density polyethylene) D.G. approved containers.  
As required by the ADG Code and the Standard for the Uniform Scheduling of Drugs and Poisons.

## 16. OTHER INFORMATION

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### Contact Person/Point

Normal Working Hours - Ph: (03) 9553 1011 Fax: (03) 9553 1387  
Ask for the Facilities Manager, Sales Manager or Services Manager.  
After Hours - Ph : 1300 558 788

Further information/advice is available to those persons responsible for the design of safe work practices on their written request to HydroChem.

This SDS summarises to the best of our knowledge at the date of issue, the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.

Hydro-Chem Pty Ltd responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

If clarification or further information is required, the user should contact Hydro-Chem Pty Ltd using the contact details provided.

### Other Information

#### ABBREVIATIONS:

ACGIH - American Conference of Government Industrial Hygienists

OSHA - Occupational Safety and Health Information

TLV - Threshold Limit Value

NOHSC - National Occupational Health & Safety Committee

Hydro Balance is a range of products developed and manufactured by Hydro-Chem for the preventative maintenance of air conditioning and refrigeration systems.

## END OF SDS

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